Author Index of Volume 51

Adriaensens, P., 219
Aeiyach, S., 339, 343, 349
Aimé, J. P., 37
Albouy, P.-A., 1
Anders, J., 103, 245, 251
Angulo, E., 87
Arbizzani, C., 63

Bartl, A., 115, 197
Beljonne, D., 123
Berlin, A., 287
Bernier, P., 103, 251
Bishop, A. R., 431
Boman, M., 187
Borghesi, A., 239
Brédas, J. L., 123
Brenna, E., 287
Briers, J., 55
Byrne, H. J., 103, 245, 251

Callaerts, R., 55
Cametti, C., 45
Carleer, R., 219
Castiglioni, C., 135
Comoretto, D., 239
Cuniberti, C., 239
Czajka, R., 397

Dannetum, P., 187
Dantas, S. O., 179
Delabouglise, D., 321
Dellepiane, G., 63, 239
Del Zoppo, M., 135
de Ruiter, B., 397
De Schrijver, D., 329
Dierick, T., 329
Domschke, G., 115
dos Santos, D. A., 203
dos Santos, M. C., 179, 203

Eevers, W., 329
Enkelmann, V., 1, 299
Epstein, A. J., 95

Feiters, M. C., 397
Fichou, D., 419
Filzmoser, M., 103
Fink, J., 103
Fischer, H., 1
Fischer, J. E., 257
Fredriksson, C., 187
Friend, R. H., 257, 357
Froehner, J., 109
Fröhner, J., 115, 197
Furlani, A., 45

Galvão, D. S., 169, 175, 179, 203
Garnier, F., 419
Garrin, P., 37
Geise, H. J., 55, 329
Gelan, J., 219
Goldenberg, L. M., 339, 343, 349
Grem, G., 383
Gussoni, M., 135
Guyot, A., 277

Halim, J., 1
Hanack, M., 103
Hernández, V., 211, 229
Hoogmartens, I., 219
Horowitz, G., 419

Iucci, G., 45

Jacobsen, T., 267
Jobst, K., 109, 425
Jozefowicz, M. E., 95

Kaino, T., 147
Kaiser, M., 103, 245, 251
Kniess, T., 115
Koopal, C. G. J., 397
Körner, F., 31
Kötzler, J., 31
Kurihara, T., 147

Lacaze, P. C., 339, 343, 349
Laks, B., 169, 175, 203
Lanzani, G., 239
Lapkowski, M., 75
Laridjani, M., 95
Lau, A., 153
Lavarda, F. C., 169, 175
Leditzky, G., 383
Lefrant, S., 277
Leising, G., 25, 383
Levi, M. D., 75
Lindgren, M., 407
Lögdlund, M., 187
López Navarrete, J. T., 211, 229

MacDiarmid, A. G., 95
Markowitsch, W., 25
Martens, H., 219
Martina, S., 299
Maser, W., 103, 251
Mastragostino, M., 63
Mathis, C., 37
Mayer, R., 115
Mertens, R., 55
Mertwoy, H., 257
Molinie, P., 277
Mori, Y., 147
Musso, G. F., 239

Nagels, P., 55
Nguyen, T. P., 277
Nolte, R. J. M., 397

Ogle, M. E., 391
Ohkawa, H., 407

Otero, T. F., 87, 307, 313

Paasch, G., 7, 109, 425
Pagani, A., 287
Peng, X.-Z., 419
Peten, C., 329
Pfeiffer, M., 153
Piaggi, A., 239
Piaggio, P., 63, 239
Pichler, K., 257
Płocharski, J., 81
Pouget, J. P., 95
Puff, H., 161

Reibel, D., 37
Reichenbach, J., 103, 245, 251
Rodríguez, J., 307

Romanow, W. J., 257
Romanow, W. J., Jr., 257
Roth, S., 103, 115, 197, 245, 251
Rui, M., 135
Russo, M. V., 45

Salaneck, W. R., 187
Sannicolò, F., 287
Santamaría, C., 313
Sasabe, H., 407
Sawtschenko, L., 109, 425
Saxena, A., 431
Schasfoort, R. B. M., 397
Scherr, E. M., 95
Schiavon, G., 287
Schier, H., 103
Schlüter, A.-D., 299
Schrader, S., 153
Schwarzenberg, M., 425
Shuai, Z., 123
Siehl, H.-U. 103
Siekierski, M., 81
Sjögren, B., 187
Skaarup, S., 267
Sohmen, E., 103
Soto, J., 229
Stafström, S., 187
Streitwolf, H. W., 161
Swanson, B. I., 431

Thummes, G., 31
Tolbert, L. M., 391
Tomaru, S., 147
Tran, V. H., 277

Ullrich, B., 383

van de Leur, R. H. M., 69
Van Der Looy, J., 329
Vanderzande, D., 219
Van Kempen, H., 397
Van Roy, M., 55

Wada, T., 407
Wegner, G., 1, 299
Werncke, W., 153
West, K., 267
Worl, L. A., 431
Wuckel, L., 109, 425

Zachau-Christiansen, B., 267
Zahab, A., 103, 251
Zerbi, G., 135
Zotti, G., 287, 373

Zuzok, R., 197

Subject Index of Volume 51

Anisotropic multilayer geometries
optical waveguiding of PMMA doped with (t-Bu)$_4$-Pb-phthalocyanine in; m-line study, 407
Anodic polymerization
low potential, of benzene in methanesulfonic and trifluoromethanesulfonic acid solutions, 349

Benzene
electropolymerization of, in two-phase strong proton acid–benzene system, 343
low potential anodic polymerization of, in methane sulfonic and trifluoromethanesulfonic acid solutions, 349
Benzylidene anilines
molecular orbitals and optical nonlinearities for symmetrically substituted, 147
Biosensor
polypyrrole microtubules and their use in construction of third-generation, 397
Bipolaron lattice
electronic properties of, in poly(*p*-phenylene), 161

Carbon
photoconductivity of C_{60}/C_{70} films, 251
p-type doping of C_{60} films, 103
Carriers
free, in heavily doped polyacetylene, 25
Carter's soliton switch
theoretical studies on, 179
Chain conformation
poly(alkylthiophenes); and thermochromism, 203
Charge separation
in mixed-halide MX crystals; novel device applications, 431
Charge-transfer complexes
with polyconjugated S compounds, new, 115
Chemical synthesis
for poly(2,5-pyrrole), progress toward development of, 299

Conducting polymers
electrochemical sensors based on polyconjugated, 373
Conductive polyheterocycles
fusion of heterocyclic polymerogenic units onto central ring; fruitful approach to investigation and specific tailoring of dependence of electrical properties on monomer structure in, 287
Conductivity
characterization and d.c., of poly(*p*-phenylene vinylene) films doped with $FeCl_3$, 55
Configuration interaction description
of linear polyenes and VEH/SOS evaluation of polyarylene vinylene; nonlinear optical processes in conjugated polymers, 123
Conformational study
and lattice dynamics of poly(*p*-phenylene); oligomers and polymer, 229
Conjugated polymer(s)
blue electroluminescent device based on, 383
nonlinear optical processes in; configuration interaction description of linear polyenes and VEH/SOS evaluation of polyarylene vinylene, 123
quantitative determination of $\chi^{(3)}$-dispersion of, by resonance CARS lineshape analysis, 153
semiconductor devices; characterisation of charged and neutral excitations, 357
Conjugated systems
polarons in non-ideal, 277
Copolymer
block, polystyrene–polyacetylene in solution, 37

α,ω-Diarylpolyenyl anions
consequences of fixed soliton confinement width for molecular 'switching', 391

α,ω-Diphenyltetradecaheptaene
electronic structure of, model molecule for polyacetylene, as studied by photoelectron spectroscopy, 187
Doping
p-type, of C_{60} films, 103

Electrical conductivity
heterogeneous, in metallic polyacetylene films, 31
Electrical properties
fusion of heterocyclic polymerogenic units onto central ring; fruitful approach to investigation and specific tailoring of dependence of, on monomer structure in conductive polyheterocycles, 287
of poly(3-n-hexylthiophene), a.c., 69
of poly(phenyl acetylene)/I system in tetrahydrofuran solutions, conductometric and high-frequency dielectric, 45
Electrochemical applications
of thermally-structurized polyconjugated polymers, 425
Electrochemical behaviour
of solute redox species on poly(thiophene) and poly(3-methylthiophene)-coated electrodes; manifestation of 'memory' effect in electrode kinetics, 75
Electrochemical doping
in situ optical spectroscopy of, of polypyrrole, 267
of poly(*p*-phenylene sulfide) in concentrated sulfuric acid, 63
Electrochemical properties
of thermally-structurized polymers, 109
Electrochemical sensors
based on polyconjugated conducting polymers, 373
Electrochemical stability
of poly(dithienothiophene), 81
Electrochemical synthesis
of composite poly(*p*-phenylene) materials, 339
Electrode(s)
electrochemical behaviour of solute redox species on poly(thiophene) and poly(3-methylthiophene)-coated; manifestation of 'memory' effect in electrode kinetics, 75
Electrogeneration
fast way, through complex mechanism, to obtain polyconjugated tailored materials, 307
Electroluminescent device
blue, based on conjugated polymer, 383
Electromagnetic fields
non-linear optical response to strong applied, in polyconjugated materials, 135
Electronic polymers
structural aspects of polyaniline family of, 95
Electronic properties
of bipolaron lattice in poly(*p*-phenylene), 161
Electronic structure(s)
of α,ω-diphenyltetradecaheptaene, model molecule for polyacetylene, as studied by photoelectron spectroscopy, 187
of polyacetylene with bonded oxygen, 175
of poly(isothianaphthene), 219
Electron spin resonance
characterization of segmented and highly oriented polyacetylene by ESR, 197
Electropolymerization
of benzene in two-phase strong proton acid–benzene system, 343
Environmental stability
of poly(dithienothiophene), 81
Excitations
conjugated polymer semiconductor devices; characterisation of charged and neutral, 357
Extended states
in disordered doped polyacetylene chains, 169

Fixed soliton confinement width
consequences of, for molecular 'switching'; α,ω-diarylpolyenyl anions, 391
Fullerene
spectroscopic investigations of, in solid state, 257

Heterocyclic polymerogenic units
fusion of, onto central ring; fruitful approach to investigation and specific tailoring of dependence of electrical properties on monomer structure in conductive polyheterocycles, 287

Impedance studies
of electrogenerated polypyrrole films, 87
Interface
role of semiconductor/insulator, in characteristics of π-conjugated-oligomer-based thin-film transistors, 419
Interface properties
control of, of conducting polypyrrole, 321
Iodine
conductometric and high-frequency dielectric properties of poly(phenyl acetylene)/I system in tetrahydrofuran solutions, 45
Iron
characterization and d.c. conductivity of poly(paraphenylene vinylene) films doped with $FeCl_3$, 55

Lattice dynamics
conformational study and, of poly(*p*-phenylene); oligomers and polymer, 229
and vibrational spectra of pristine, doped, and photoexcited poly(3-methylthiophene), 211
Lead
optical waveguiding of PMMA doped with $(t\text{-}Bu)_4$-Pb-phthalocyanine in anisotropic multilayer (μm) geometries, m-line study, 407

Methanesulfonic acid
low potential anodic polymerization of benzene in, and trifluoromethanesulfonic acid solutions, 349
Microtubules
polypyrrole, and their use in construction of third generation biosensor, 397
Mixed-halide MX crystals
charge separation in; novel device applications, 431
m-line study
optical waveguiding of PMMA doped with $(t\text{-}Bu)_4$-Pb-phthalocyanine in anisotropic multilayer (μm) geometries, 407
Molecular orbitals
and optical nonlinearities for symmetrically substituted benzylidene anilines, 147

Monomer structure
fusion of heterocyclic polymerogenic units onto central ring; fruitful approach to investigation and specific tailoring of dependence of electrical properties on, in conductive polyheterocycles, 287

Optical nonlinearities
molecular orbitals and, for symmetrically substituted benzylidene anilines, 147
Optical processes
nonlinear, in conjugated polymers; configuration interaction description of linear polyenes and VEH/SOS evaluation of polyarylene vinylene, 123
Optical properties
and photoinduced absorptions in unsymmetrical polycarbazolyldiacetylenes, 239
Optical response
non-linear, to strong applied electromagnetic fields in polyconjugated materials, 135
Optical spectroscopy
of electrochemical doping of polypyrrole, *in situ*, 267
Optical waveguiding
of PMMA doped with $(t\text{-}Bu)_4$-Pb-phthalocyanine in anisotropic multilayer (μm) geometries; m-line study, 407
Organic metals
design of polymeric; structure–property relationships, 1
Organic solvents
poly(2,5-heteroarylene vinylene) from precursor polymer soluble in, 329
Oxygen
electronic structure of polyacetylene with bonded, 175

Photoconductivity
of C_{60}/C_{70} films, 251
picosecond, in $(CH)_x$, 245
Photoelectron spectroscopy
electronic structure of α,ω-diphenyltetradecaheptaene, model molecule for polyacetylene, as studied by, 187
Photoinduced absorptions
optical properties and, in unsymmetrical polycarbazolyldiacetylenes, 239
Phthalocyanine
optical waveguiding of PMMA doped with $(t\text{-}Bu_4)$-Pb-phthalocyanine in an-

isotropic multilayer (μm) geometries; m-line shape, 407
PMMA
optical waveguiding of PMMA doped with (t-Bu)$_4$-Pb-phthalocyanine in anisotropic multilayer (μm) geometries; m-line study, 407
Polarons
in non-ideal conjugated systems, 277
Polyacetylene
block copolymer polystyrene–polyacetylene in solution, 37
characterization of segmented and highly oriented, by ESR, 197
electronic structure of, with bonded oxygen, 175
electronic structure of α,ω-diphenyltetradecaheptaene, model molecule for, as studied by photoelectron spectroscopy, 187
extended states in disordered doped, chains, 169
free carriers in heavily doped, 25
heterogeneous electrical conductivity in metallic, films, 31
picosecond photoconductivity in $(CH)_x$, 245
transport properties of new, 7
Poly(alkylthiophenes)
chain conformation and thermochromism, 203
Polyaniline
structural aspects of, family of electronic polymers, 95
Polyarylene vinylenes
nonlinear optical processes in conjugated polymers; configuration interaction description of linear polyenes and VEH/SOS evaluation of, 123
Polycarbazolyldiacetylenes
optical properties and photoinduced absorptions in unsymmetrical, 239
Polyconjugated conducting polymers
electrochemical sensors based on, 373
Polyconjugated materials
non-linear optical response to strong applied electromagnetic fields in, 135
Polyconjugated polymers
electrochemical applications of thermally structurized, 425
Polyconjugated tailored materials
electrogeneration; fast way, through complex mechanism, to obtain, 307
Poly(dithienothiophene)
environmental and electrochemical stability of, 81
Polyenes
nonlinear optical processes in conjugated polymers; configuration interaction description of linear, and VEH/SOS evaluation of polyarylene vinylenes, 123
Poly(2,5-heteroarylene vinylene)
from precursor polymer soluble in organic solvents, 329
Poly(isothianaphthene)
electronic structure of, 219
Polymeric organic metals
design of; structure–property relationships, 1
Poly(3-methylthiophene)
-coated electrodes, electrochemical behaviour of solute redox species on poly(thiophene) and; manifestation of 'memory' effect in electrode kinetics, 75
lattice dynamics and vibrational spectra of pristine, doped, and photoexcited, 211
Poly(3-n-hexylthiophene)
a.c. electrical properties of, 69
Poly(phenyl acetylene)
/I system in tetrahydrofuran solutions, conductometric and high-frequency dielectric properties of, 45
Poly(*p*-phenylene)
conformational study and lattice dynamics of; oligomers and polymer, 229
electrochemical synthesis of composite, materials, 339
electronic properties of bipolaron lattice in, 161
Poly(*p*-phenylene sulfide)
electrochemical doping of, in concentrated sulfuric acid, 63
Poly(*p*-phenylene vinylene)
films doped with $FeCl_3$, characterization and d.c. conductivity of, 55
Polypyrrole
chemical synthesis for poly(2,5-pyrrole), progress toward development of, 299
control of interface properties of conducting, 321
impedance studies of electrogenerated, films, 87

microtubules and their use in construction of third generation biosensor, 397
in situ optical spectroscopy of electrochemical doping of, 267
Polypyrrole production
dependence of, on potential, 313
Polystyrene
block copolymer polystyrene–polyacetylene in solution, 37
Poly(thiophene)
electrochemical behaviour of solute redox species on, and poly(3-methylthiophene)-coated electrodes; manifestation of 'memory' effect in electrode kinetics, 75
Potential
dependence of polypyrrole production on, 313
Proton acid–benzene system
electropolymerization of benzene in two-phase strong, 343

Resonance CARS
line-shape analysis, quantitative determination of $\chi^{(3)}$-dispersion of conjugated polymers by, 153

Semiconductor devices
conjugated polymer; characterisation of charged and neutral excitations, 357
Semiconductor/insulator interface
role of, in characteristics of π-conjugated-oligomer-based thin-film transistors, 419
Soliton switch
theoretical studies on Carter's, 179
Solute redox species
electrochemical behaviour of, on poly(thiophene) and poly(3-methylthiophene)-coated electrodes; manifestation of 'memory' electrodes kinetics, 75
Spectroscopic investigations
of fullerene in solid state, 257
Structural aspects
of polyaniline family of electronic polymers, 95
Structure–property relationships
design of polymeric organic metals, 1
Sulfur
new charge-transfer complexes with polyconjugated S compounds, 115

Theoretical studies
on Carter's soliton switch, 179
Thermally-structurized polymers
electrochemical applications of, polyconjugated, 425
electrochemical properties of, 109
Thermochromism
poly(alkylthiophenes); chain conformation and, 203
Thin-film transistors
role of semiconductor/insulator interface in characteristics of π-conjugated-oligomer-based TFT, 419
Third generation biosensor
polypyrrole microtubules and their use in construction of, 397
Third-order susceptibilities
quantitative determination of $\chi^{(3)}$-dispersion of conjugated polymers by resonance CARS line-shape analysis, 153
Transistors
role of semiconductor/insulator interface in characteristics of π-conjugated-oligomer-based thin-film, 419
Transport properties
of new polyacetylene, 7
Trifluoromethanesulfonic acid
low potential anodic polymerization of benzene in methanesulfonic and, solutions, 349

Valence effective Hamiltonian
nonlinear optical processes in conjugated polymers; configuration interaction description of linear polyenes and VEH/SOS evaluation of polyarylene vinylenes, 123
Vibrational spectra
lattice dynamics and, of pristine, doped, and photoexcited poly(3-methylthiophene), 211